1. (a) (i) Outline **three** advantages of using materials stored on a CD ROM over the Internet. (3 marks)

   (ii) Joseph aspires to motivate students through public speech. Describe **three** communication skills he should possess in order to achieve his objective. (6 marks)

   (b) Mamlaka TTI received computers of varied specifications from well-wishers. The school computer technician is required to install necessary software in the computers.

   (i) Outline **four** factors that should be considered before installation. (4 marks)

   (ii) In the process of installing software in one of the computers, the operation aborted. Explain **two** possible causes for the abortion. (4 marks)

   (c) Assuming that you have been approached by a large company as an ICT expert to assist in the procurement of software for the firm. Outline **three** factors that you should consider when selecting the software. (3 marks)

2. (a) Outline **four** main characteristics of the *fourth generation* computers. (4 marks)

   (b) An ICT firm intends to recruit the following personnel through an advertisement. Outline **two** roles for each personnel that are likely to be included in the advert.

   (i) computer operator;

   (ii) software engineer;

   (iii) network administrator. (6 marks)

   (c) Jumbo Training Institute would like to develop an ICT policy in line with the performance contract requirement. Outline **four** issues likely to be incorporated in the policy. (4 marks)

   (d) (i) Define the term *computer network*. (2 marks)

   (ii) State **two** differences between an *Intranet* and the *Internet*. (4 marks)

3. (a) (i) Explain the term Information Communication Technology (ICT). (2 marks)

   (ii) Explain **two** ways in which computers are used in education. (4 marks)

   (b) Describe each of the following computer devices citing **one** area of application for each of them.

   (i) digitizer;

   (ii) bar coding. (6 marks)

(c) Susana is experiencing fatigue and eye strain as a result of using a computer monitor for a long period. State **three** aspects of the monitor that she should consider in order to take care of her health. (4 marks)

(d) Assuming that you have been appointed as an arbitrator, outline **four** skills that you should possess. (4 marks)

4 (a) Explain **three** ways in which students can manage various forms of stress.
(6 marks)

(b) Outline **four** requirements of the *Data Protection Act*. (4 marks)

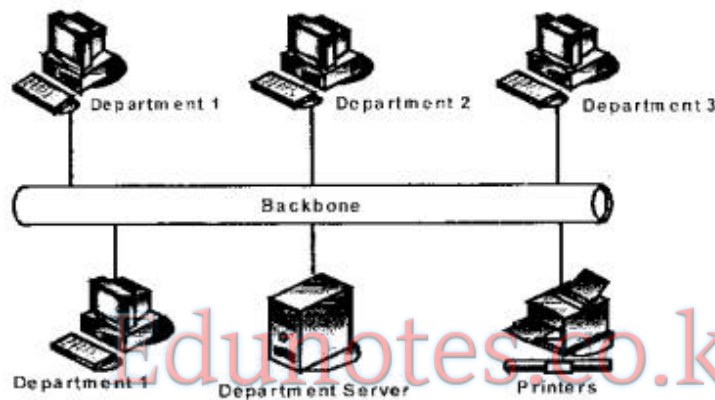(c) Figure 2 shows a network design for an organisation. Use it to answer the question that follows.



Figure 1

Explain **two** disadvantages of the topology. (4 marks)

(d) Distinguish between *magnetic* and *optical* media devices giving an example in each case. (6 marks)

5. (a) State the contribution of each of the following scientists in the evolution of computers:

(i) Blaise Pascal;

(ii) Charles Babage. (2 marks)

(b) A business firm with many clients intends to market their products through the Internet. Explain **two** benefits it may derive from this strategy. (4 marks)

(c)     When Peter inserted a CD in a computer the following information was displayed.

| Name | Size | Type |
|------|------|------|
| autorun.inf | 1KB | Setup Information |
| eula.rtf | 61KB | Rich Text Format |
| Mavis Win.ico | 49 KB | Icon |
| ReadMe.txt | 32 KB | Word Document |
| setup.exe | 348 KB | Application |

(i)     Explain the purpose of each of the following files during the installation of the software on the CD

I.      autorun.inf

II.     setup.exe                                                      (4 marks)

(ii)    Explain the function of the *eula.rtf* file with respect to software nstallation.
                                                                        (2 marks)

(d)    (i)     Explain the following terms as used in computers:

I.      electronic eavesdropping;

II.     electronic jamming.                                           (4 marks)

(ii)    With the aid of a diagram, describe a *mesh network* topology.
                                                                        (4 marks)

6.    (a)     Jemmy Mobile Company intends to introduce a money transfer services for its clients. Outline **four** benefits that the clients will derive from this service.
                                                                        (4 marks)

(b)     Distinguish between *soft-copy* and *hard-copy* output.        (4 marks)

(c)     Some college students exhibit lack of *self-confidence* in academics.

(i)     Explain the term *self-confidence*.

(ii)    Outline **two** characteristics of such a student.            (4 marks)

(d)    (i)     Define the term *conflict*.                            (2 marks)

(ii)    Anne is constantly having conflicts with her siblings over how to share workload at home. Explain **three** approaches that she should employ in order to resolve these conflicts.                              (6 marks)

7.    (a)     Describe each of the following application software giving an example in each case:

(i)     presentation;

(ii)    CAD;

(iii)   DTP.                                                           (6 marks)

(b) State **two** benefits that can arise when a company adopts a policy of social responsibility to each of the following:

    (i)      company itself;

    (ii)     community and the general public;

    (iii)    environment. (6 marks)

(c)    (i)      Explain the reason for storing firmware in ROM rather than in the hard disk. (2 marks)

    (ii)     Outline **two** functions of the *control unit* in a computer system. (2 marks)

(d) Goodhope Academy is a school whose management intends to put up an ICT centre for its learners. Outline **four** guidelines that should be considered by management when designing the centre. (4 marks)

8.    (a)    State **two** functions of each of the following computer devices.

    (i)      output;

    (ii)     input. (4 marks)

(b) A company intends to use the tendering method to procure general purpose software. Outline **six** steps that could be used by the tender committee to meet the objective. (6 marks)

(c) Oldgoldie is an IT firm which purchases e-waste from learning institutions and refurbishes those which are still in good condition.

    (i)      Outline **two** social responsibilities related to it's core activities that the company is likely to be engaged in.

    (ii)     State **two** challenges that this firm is likely to encounter when providing social responsibility services. (4 marks)

(d) Susan encountered the options *Upgrade*, *Uninstall* and *Repair* when she was installing software in her computer. Explain the circumstance under which each option is applicable. (6 marks)